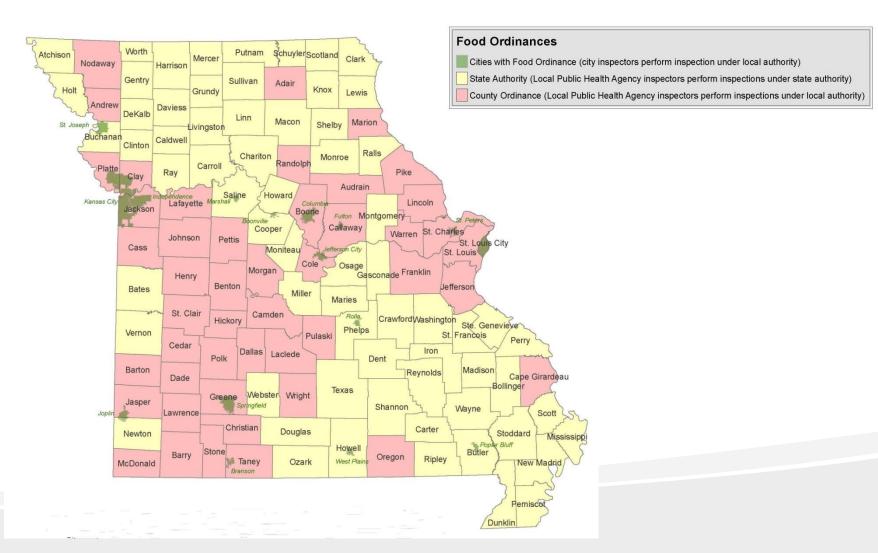
Serving School Garden Produce on the Salad Bar: Keeping it Safe!







Food Safety – Local Links





2013-2014 School Year



AT LEAST

116 SCHOOL GARDENS ARE

GROWING IN MISSOURI

TEND AND WATER THOSE GARDENS;

THEIR BENEFITS ARE WELL

DOCUMENTED!



USDA Food and Nutrition Service School Garden Q & As



Allowable expenses using school nutrition program funds

- Equipment
- Materials
- seeds, compost, fertilizer
- FFVP program funds may not be used

www.fns.usda.gov/cnd/governance/Policy-Memos/2009/SP 32-2009 os.pdf



School Garden Food Safety Checks:

- ✓ Water source
- ✓ Soil test
- ✓ Building material
- ✓ Location
- **←**Chemicals & Fertilizers
- ✓ Compost



Safe Water Sources

- Test all non-municipal sources
- Transport water in food grade containers if it comes into contact with produce





- Test soil
- Find your county extension office:

www.nifa.usda.gov/Extension/index.html

- Consider purchasing soil from a commercial source that is:
 - Traceable
 - Intended for growing food crops



Safe Materials

Use materials that are non-toxic, non-leaching

- Cedar, untreated pine, or fir
- Terra cotta pots
- Concrete
- Unused livestock water troughs (drill drain holes)
- Burlap filled with straw
- Straw bales







Materials to Avoid

- Pressure-treated lumber or plywood
- Used tires
- Rail road ties
- Old bricks with paint





Site Selection

- Locate away from contamination
- Know what's below; call 811 before you dig (Call-Wait-Dig-Live)
- Construct reasonable barriers





Chemicals and Fertilizers

- Best practice = no chemicals
- Contact local Cooperative Extension office for pest control recommendations
- Maintain current Safety Data Sheets
 - Available from the manufacturer
- Follow manufacturer's directions for all products



Compost and Manure Use

- Do not use raw or composted manure
- Consider purchasing commercially prepared compost
- Contact local Cooperative Extension office for assistance with composting
 - Use only plants, such as fruit and vegetable trimmings, grass, leaves, and twigs
 - Avoid animal products, animal waste, and unseparated cafeteria waste
 - Consider vermicompost
- Wear gloves
- Locate compost pile away from sources of contamination



Compost

- Food compost must reach temperature of at least 130°F for at least 5 days to kill pathogens
- Check temperature with a large compost thermometer





Working In and Maintaining the Garden

- Communicate with school grounds crew and/or maintenance staff to ensure safe practices on the school grounds near the garden
 - Do not use pesticides or herbicides in or around garden
- Keep cats, dogs, and other pets out of the garden as animal waste can be a source of bacteria, parasites, and viruses
- Do not feed wild animals or birds near your garden



Working In and Maintaining the Garden

 All garden participants must wear closedtoe shoes when working in the garden

Do not allow anyone to work in the garden

while sick





Harvesting Garden Produce

- Plan ahead to make harvesting the first task you do in the garden before other activities involving weeding, watering, maintaining, etc.
- Always wash your hands before harvesting fresh produce
- Pick up and remove rotting produce
- Any animal feces present should be discarded by an adult
- Produce immediately around the feces should also be discarded and immediately wash hands to avoid contamination of other produce



Harvest Tools

- Clean with soap & water
 - Before AND after harvest







Harvest Containers

- Clean & sanitized
 - Food grade containers
- Do not assume
 - If it doesn't say it, don't use it
- Do not use
 - Garbage bags or cans
 - Used plastic grocery bags







Garden Produce in the Kitchen



- Planning is essential!
 - -Crops . . . start simple!
 - -Recipes!

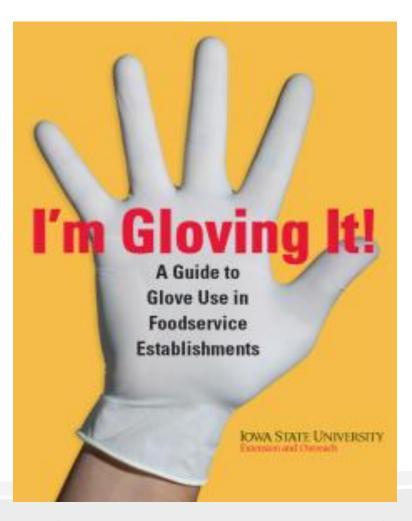


Garden Produce in the Kitchen

- Start with something easy like HERBS!
- These herbs were planted in a #10 can
- Cute for decorating the salad bar or lunchroom



Glove-up for salad bar safety!



- Wash hands before putting on gloves
- Wear gloves when handling ready to eat foods
- Discard gloves after one use – do not reuse or save
- Wash hands & change gloves between tasks



The single most important step to prevent food-borne illness. . .

"Hand washing is the single most important means of preventing the spread of infection."

Centers for Disease Control& Prevention



Handwashing 101 for students & staff



For more detailed information: http://www.cdc.gov/handwashing/show-me-the-science-handwashing.html

Hand Washing



 Hand sanitizers can be effective when used after hand washing, but are not a substitute



Receiving Garden Produce

- Only when school nutrition staff is present
- Produce left when staff is not present should not be used in school meals





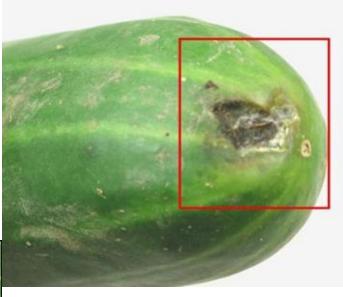
Receiving Garden Produce

Avoid using when

- Noticeably contaminated
- If unacceptable



Hail damaged peaches



Decayed cucumber



Storing Garden Produce

- Refrigerate cold items immediately!
 - 41 degrees F
- Do not wash before storing
- Harvest date and label container
- Production records to show when item was served



Storing Garden Produce

Cold Storage

41 degrees F

- Carrots
- Radishes
- Green Beans
- Spinach/Lettuce
- Cabbage
- Peppers

Dry Storage

55-65 degrees F

- Tomatoes
- Onions
- Sweet Potatoes
- Potatoes
- Winter Squash
- Watermelons

Source: USDA, Produce Safety University



Garden Produce: Preparation and Service

- Shake or remove soil in the garden
- Wash produce under running water before preparation
- Scrub using a vegetable brush
- Identify vegetable sink
- Never use unapproved chemicals

Garden Produce: Preparation and Service

Running water



Vegetable brush





Garden Produce: Preparation and Service

- Are commercial vegetable washes necessary?
 - NO. Research has proven commercial vegetable washes provide no <u>significant</u> benefits over running water and scrubbing with clean hands or brushes
 - It is more cost effective to wash produce with cold running water than with:
 - Apple cider vinegar
 - Bleach
 - Lemon juice
 - Vinegar

Source: http://www.umaine.edu/publications/4336e

Serve it on the Salad Bar!







Fresh Produce Donations

- Communicate with stakeholders
- Check local and/or state regulations
- Discuss liability
- Maintain traceability



USDA Photo by Lance Cheung







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